Process for the preparation of a crystalline solid of derivatives of (N,N-diacetic acid) glycine with an adequately reduced hygroscopicity

Patent number: EP0845456

Publication date: 1998-06-03

Inventor: SCHOENHERR MICHAEL DR (DE); RAULS MATTHIAS DR (DE); ASCHERL HERMANN (DE); LETZELTER THOMAS (DE); BAUMANN DIETER (DE); POTTHOFF-KARL BIRGIT DR (DE)

Applicant: BASF AG (DE)

Classification:

- international: C07C227/42

- european: C07C227/42

Application number: EP19970119147 19971103

Priority number(s): DE19961049681 19961129

Also published as:

US5981798 (A1)
JP10175929 (A)
EP0845456 (A3)
DE19649681 (A1)
EP0845456 (B1)

Cited documents:

US3956379
WO9429421
GB2024203

Report a data error here

Abstract of **EP0845456**

A method for the preparation of a crystalline solid comprising a glycine-N,N-diacetic acid derivative of formula (I) with a very low hygroscopicity, comprises fixing the water content of the starting material containing (I) at 10-30 wt.% and then carrying out crystallisation: MOOC-CH(R)-N(CH2COOM)2 (I) R = 1-30C alkyl or 2-30C alkenyl (both optionally containing 1-5 OH, formyl, 1-4C alkoxy(carbonyl) or phenoxy groups and/or optionally containing up to 5 non-adjacent O atoms in the chain), alkoxylate groups of formula (II), phenyl-(1-20 C)-alkyl (optionally containing up to 3 1-4C alkyl, OH, carboxyl, sulpho or 1-4C alkoxycarbonyl ring substituents), 5- or 6-membered optionally benzalated heterocyclic ring containing up to 3 N, O or S atoms (optionally containing up to 3 1-4C alkyl, OH, carboxyl, sulpho or 1-4C alkoxycarbonyl substituents) or a group of formula (III): -(CH2)k-O-(A<1>O)m-(A<2>O)n-Y (II) -A-CH(COOM)-N(CH2COOM)2 (III) A<1>, A<2> = 2-4C 1,2-alkylene; Y = H, 1-12C alkyl, phenyl or 1-4C alkoxycarbonyl; k = 1-3; m, n = 0-50; A = 1-12C alkylene or single bond; and M = H, alkali(ne earth) metal or optionally substituted ammonium, with the provision that m+n = at least 4.
